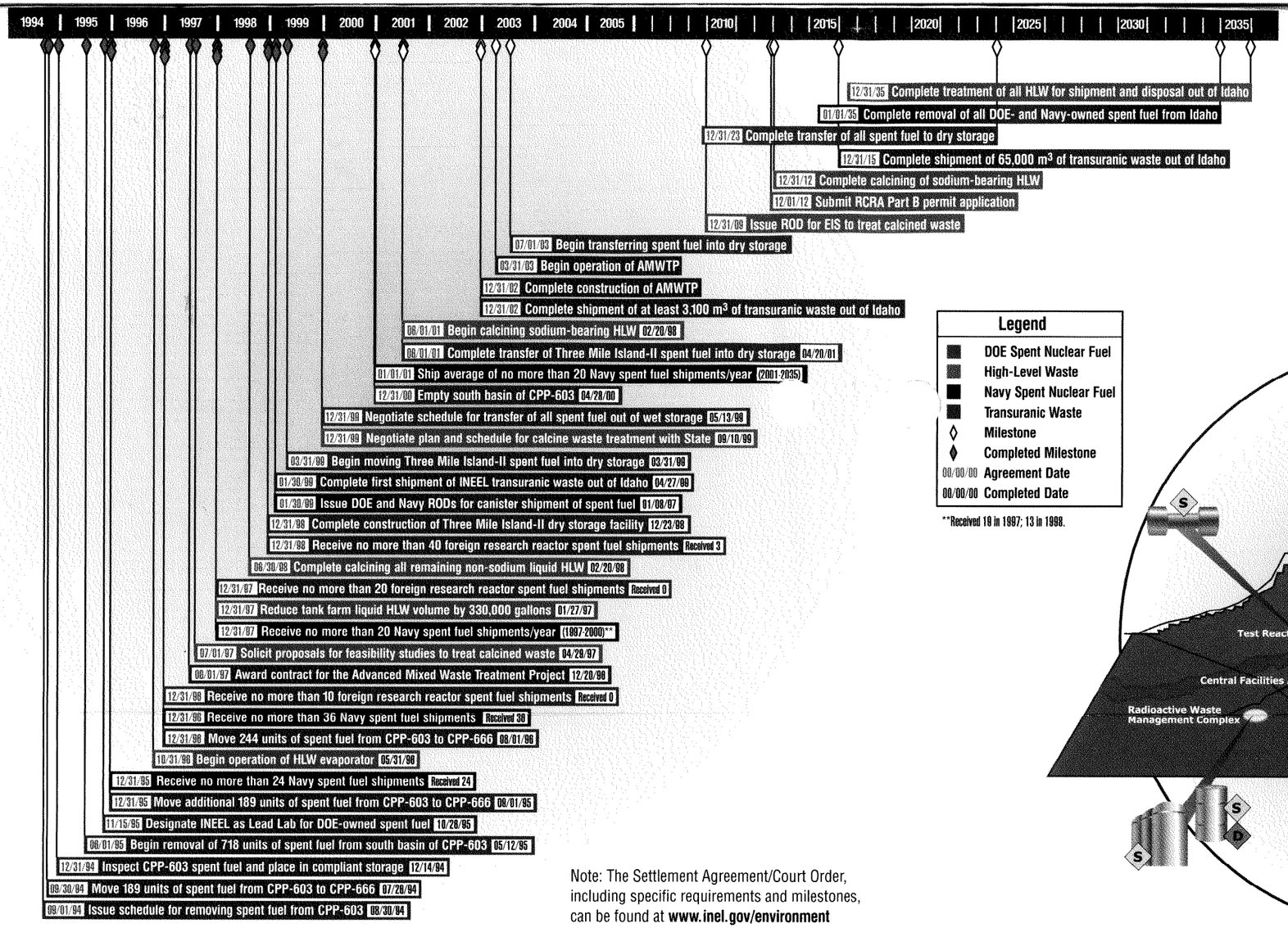
comply with federal law in the management of mixed waste at the INEEL.

Settlement Agreement/Court Order

This 1995 agreement, between the DOE, U.S. Navy and state of Idaho, resolved the legal disputes regarding the receipt of spent nuclear fuel at the INEEL. The court order specifies milestones and deadlines that will guide the INEEL's management of spent nuclear fuel and many historic radioactive wastes through 2035.

Voluntary Consent Order

This agreement, signed in June 2000 by DOE officials and the Idaho Division of Environmental Quality, outlines a 19-year schedule for achieving waste compliance in several areas of concern at the INEEL, including the characterization of more than 700 tanks or their ancillary equipment.

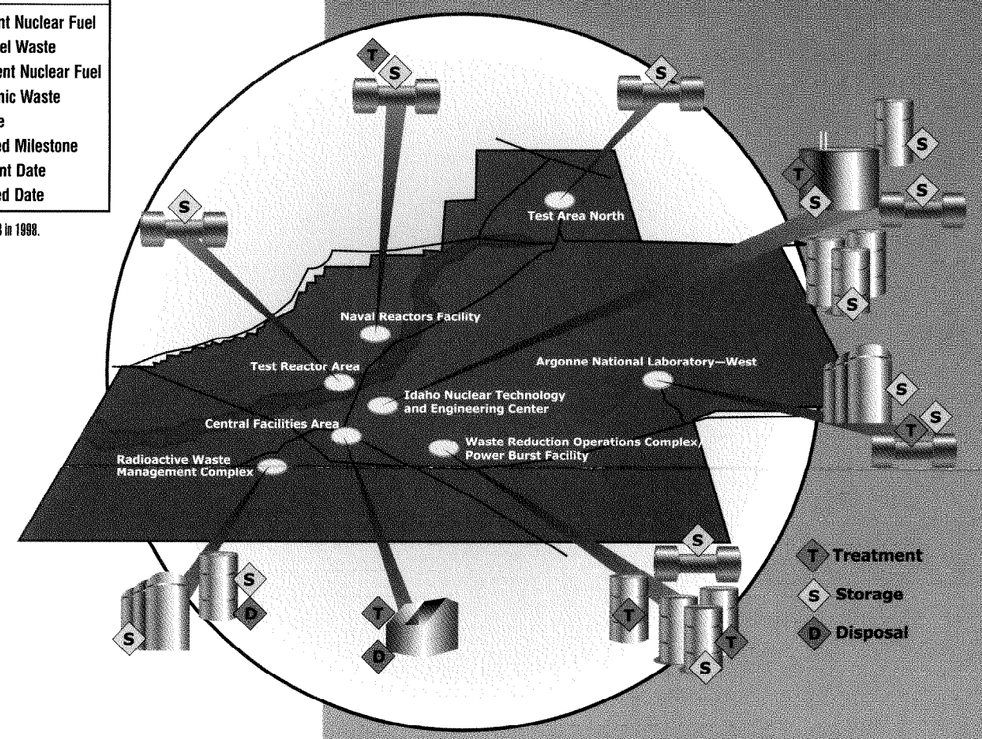


Legend

- DOE Spent Nuclear Fuel
- High-Level Waste
- Navy Spent Nuclear Fuel
- Transuranic Waste
- Milestone
- Completed Milestone
- 00/00/00 Agreement Date
- 00/00/00 Completed Date

**Received 19 in 1997; 13 in 1998.

Note: The Settlement Agreement/Court Order, including specific requirements and milestones, can be found at **www.inel.gov/environment**



Transuranic

- Contains elements with atomic numbers greater than 92, has radioactivity greater than 100 nanocuries per gram and has a half-life of more than 20 years
- Transuranic waste stored aboveground is governed by the 1995 Settlement Agreement/Court Order
- Chiefly resulted from Cold War weapons production
- Requires permanent isolation for disposal at WIPP

High-Level

- Contains long-lived radionuclides and hazardous substances such as acids, caustics, metals and organic solvents
- Exists in both liquid and solid forms
- Generated by only a few processes (spent nuclear fuel reprocessing, now ceased, produced this waste at the INEEL)
- Requires permanent isolation for disposal
- Governed by the 1995 Settlement Agreement/Court Order and Voluntary Consent Order

Low-Level

- Defined by not meeting the definitions for high-level, transuranic, spent nuclear fuel or byproduct materials
- Does not contain hazardous substances
- Generated by most nuclear activities
- Chiefly consists (at the INEEL) of contaminated wood, soils, tools and equipment
- Often incinerated, sized or compacted before disposal in below-ground containers or vaults both on- and off-site (alternatives to incineration are being developed)

Hazardous

- Contains corrosive, ignitable, reactive or toxic materials
- Does not contain radioactive components
- Generated by everyday activities
- Often consists of process waste, organic solvents, lead and lead-contaminated debris
- Characterized and shipped out of Idaho to commercial treatment and disposal facilities within 90 days of generation

Mixed Low-Level

- Contains components of both low-level radioactive and hazardous waste
- May contain radionuclides
- Often includes metals, acids, organic solvents, cyanides, explosive compounds and caustics
- Generated by nuclear defense, facility dismantlement and research activities
- Formerly treated by incineration; new treatment technologies are now being studied and developed
- Governed by the Site Treatment Plan

Industrial

- Consists of solid waste debris such as asbestos, paper or wood
- Does not contain hazardous or radioactive components
- Generated by industrial activities
- Disposed of at the INEEL or Bonneville County landfills

Spent Nuclear Fuel

- Nuclear fuel that no longer effectively produces energy
- Results from national defense and other programmatic missions
- Stored in both wet and dry facilities
- Will be disposed of at a national repository not yet identified
- Shipment of spent fuel to a national repository must begin by Sept. 30, 2016
- All spent fuel must be out of Idaho by Jan. 1, 2035 (a Settlement Agreement milestone)

INEEL Battelle Energy Alliance Managing Idaho National Engineering and Environmental Laboratory

DEPARTMENT OF ENERGY · UNITED STATES OF AMERICA

April 2001